

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448A/PTO			Complete If Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	10600487	
			Filing Date		
			First Named Inventor	LUBY, MICHAEL G.	
			Group Art Unit		
			Examiner Name		
Sheet	1	of	2	Attorney Docket Number	019186-000640

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
P/D	AA	4,365,338		McRAE et al.	12/21/82	375/230
	AB	5,432,787		CHETHIK	07/11/85	330/473
	AC	5,608,738		MATSUSHITA	03/04/87	376/473
	AD	5,817,541		ALBANESE et al.	04/01/87	714/752
	AE	6,805,825		DANNEELS et al.	08/08/98	709/201
	AF	6,883,383		WOLF	11/08/99	709/243
	AG	5,993,058		VAMAN et al.	11/30/99	714/755
	AH	6,073,250		LUBY et al.	08/06/00	714/716
	AI	6,081,909		LUBY et al.	06/27/00	714/716
	AJ	6,081,918		SPIELMAN	06/27/00	714/701
	AK	6,163,870		LUBY et al.	12/19/00	714/746
	AL	6,178,536		SORKIN	01/23/01	714/746
	AM	6,185,777		LUBY et al.	02/27/01	714/752

FOREIGN PATENT DOCUMENTS							
Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office	Number ⁴	Kind Code ⁵ (if known)			
P/D	AN		EP 0 854 850 A2		European Patent Office	07/22/98	
P/D	AO		WO 96 34483 A		World Intellectual Property Organization	10/31/96	

Examiner Signature	P. JeanPierre	Date Considered	6/27/05
--------------------	---------------	-----------------	---------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

SF 1314800 v1

Please type a plus sign (+) inside this box → +

PTO/SB/088 (08-00)

Approved for use through 10/31/2002. OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td style="width: 50%;">10600484</td> </tr> <tr> <td>Filing Date</td> <td></td> </tr> <tr> <td>First Named Inventor</td> <td>LUBY, MICHAEL G.</td> </tr> <tr> <td>Group Art Unit</td> <td></td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Attorney Docket Number</td> <td>019186-000640</td> </tr> </table>		Application Number	10600484	Filing Date		First Named Inventor	LUBY, MICHAEL G.	Group Art Unit		Examiner Name		Attorney Docket Number	019186-000640
Application Number	10600484														
Filing Date															
First Named Inventor	LUBY, MICHAEL G.														
Group Art Unit															
Examiner Name															
Attorney Docket Number	019186-000640														
Sheet	2	of	2												

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
P/D	AP	ALON et al., "Linear Time Erasure Codes With Nearly Optimal Recovery," Proceedings Of The Annual Symposium On Foundations Of Computer Science, US, Los Alamitos, IEEE Comp. Soc. Press, Vol. Symp. 36, Pages 612-616 (October 23, 1995), XP 000557871	
	AQ	BIGLOO et al. "A Robust Rate-Adaptive Hybrid ARQ Scheme For Frequency-Hopped Spread-Spectrum Multiple-Access Communication Systems" IEEE Journal On Selected Areas In Communications, US, IEEE Inc, New York, (June 1 1994) pages 917-924, XP0000464977	
	AR	BLÖMER et al., "An XOR-Based Erasure-Resilient Coding Scheme," ICSI Technical Report No. TR-95-048 (1995) [avail. at ftp://ftp.icsl.berkeley.edu/pub/techreports/1995/tr-95-048.pdf] <i>Page 1, No month</i>	
	AS	BYERS et al., "A Digital Fountain Approach to Reliable Distribution of Bulk Data", International Computer Science Institute Technical Report TR-98-013 (May, 1998) [available at ftp://ftp.icsl.berkeley.edu/pub/techreports/1998/tr-98-013.pdf] <i>PAGE 1</i>	
	AT	BYERS et al., "Accessing Multiple Mirror Sites In Parallel: Using Tornado Codes to Speed Up Downloads," International Computer Science Institute Technical Report TR-98-021 (1998) [available at http://www.icsl.berkeley.edu/~tuby/PAPERS/mimdown.ps] <i>Page 1, No month</i>	
	AU	BYERS et al., "Accessing Multiple Mirror Sites In Parallel: Using Tornado Codes To Speed Up Downloads" Proceeding IEEE Infocom. The Conference On Computer Communications, US New York, (March 21 1999) pages 275-283, XP000868811	
	AV	ESAKI et al. "Reliable IP Multicast Communication Over ATM Networks Using Forward Error Correction Policy" IEICE Transactions On Communications, JP, Institute of Electronics Information and Comm. ENG. Tokyo, vol. E78-V, No. 12, (December 1995), pages 1622-1637, XP000556183	
	AW	LUBY et al., "Analysis of Low Density Codes and Improved Designs Using Irregular Graphs", International Computer Science Institute Technical Report TR-97-045 (November, 1997) [available at ftp://ftp.icsl.berkeley.edu/pub/techreports/1997/tr-97-045.pdf]	
	AX	LUBY et al., "Analysis of Random Processes via And-Or Tree Evaluation," ICSI Technical Report No. TR-97-042 (1997) and Proceedings of the 9th Annual ACM Symposium on Discrete Algorithms (1998) [available at ftp://ftp.icsl.berkeley.edu/pub/techreports/1997/tr-97-042.pdf] <i>No month</i>	
	AY	LUBY et al., "Improved Low-density Parity-Check Codes Using Irregular Graphs and Belief Propagation", International Computer Science Institute Technical Report TR-97-044 (November, 1997) [available at ftp://ftp.icsl.berkeley.edu/pub/techreports/1997/tr-97-044.pdf]	
	AZ	LUBY et al., "Tornado Codes," Practical Loss-Resilient Codes, 28th Annual ACM Symposium on Theory of Computing (1997) <i>No month</i>	
	AAA	PURSLEY et al. "Variable-Rate Coding For Meteor-Burst Communications" IEEE Transactions on Communications, US, IEEE Inc, New York (1989) Vol. 37, No. 11, pages 1105-1112, XP000074533 <i>No month</i>	
	ABB	SESHAN et al. "Handoffs In Cellular Wireless Networks: The Daedalus Implementation and Experience" Wireless Personal Communications, NL, Kluwer Academic Publishers, Vol. 4, No. 2, 1 March 1997, pages 141-182, XP000728589	
P/P	ACC	SHACHAM, N., "Packet Recovery And Error Correction In High-Speed Wide-Area Networks," Proceedings Of The Military Communications Conference, (Milcom), US, New York, IEEE, Vol. 1, Pages 551-557, (1989), XP 000131876 <i>No month</i>	

Examiner Signature	R Jean Pierre	Date Considered	6/27/03
--------------------	---------------	-----------------	---------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.
SF 1314800 v1